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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONATHAN EDWARD BISHOP

Appeal 2017-004731
Application 13/704,677
Technology Center 3700

Before HUBERT C. LORIN, BRUCE T. WIEDER, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

BAYAT, *Administrative Patent Judge*.

DECISION ON APPEAL¹

STATEMENT OF THE CASE

Jonathan Edward Bishop (“Appellant”)² appeals under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 1–18 and 21–26. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM.

¹ Our Decision references Appellant’s Appeal Brief (“Appeal Br.,” filed Mar. 8, 2016), Reply Brief (“Reply Br.,” filed Nov. 7, 2016), the Examiner’s Answer (“Ans.,” mailed Sept. 8, 2016) and the Final Office Action (“Final Act.,” mailed Nov. 6, 2015).

² Appellant identifies the inventor, Jonathan Edward Bishop, as the real party in interest (Appeal Br. 3).

THE INVENTION

Appellant's claimed invention relates to assisting interactions between humans (Spec. 1, 1. 2). Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A computer-implemented method of assisting interaction between a user with social orientation impairments and at least one human, said interaction between said user and said at least one human occurring face-to-face within a same physical space, the method including:

receiving, via a user interface of a computing device having a processor and a database, action electronic data representative of at least one action performed by the at least one human;

transferring said action electronic data within said computing device from said user interface to the processor;

decoding, using the processor having a data matching module, the action electronic data to generate action-meaning data, wherein the step of decoding comprises extracting, using a speech or image processing module within the processor, at least a subset of the action electronic data, said subset of the action electronic data being representative of an emotive or behavioural aspect of the at least one action performed by the at least one human, comparing said subset of the action electronic data against stored data in the database representative of known emotive or behavioural actions to identify a match, and generating action-meaning electronic data corresponding to a matching emotive or behavioural action;

using the data matching module to generate, using the action-meaning electronic data, response electronic data representative of how the user with social orientation impairments should respond to the at least one action performed by the at least one human, wherein the data matching module is configured to search, using said action-meaning electronic data, a database storing a plurality of action-meaning/response combination electronic data to identify a match and generate said response electronic data based on said match;

providing said response electronic data to said user with social orientation impairments via said user interface;
wherein said processor further includes a response persuading component, said response persuading component receiving data representative of whether or not the user with social orientation impairments proposes to respond or has responded in accordance with said response electronic data and, if not, generating further response electronic data representative of why the user should respond in a manner indicated and/or a potential result of the user failing to respond in the manner indicated; and
capturing, via the user interface, electronic data representative of how the user actually responds.

THE REJECTION³

Claims 1–18 and 21–26 are rejected under 35 U.S.C. § 101 as being directed to judicially-excepted subject matter.

ANALYSIS

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (internal quotation marks and citation omitted).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus*

³ The rejections under 35 U.S.C. §§ 112 and 103 are withdrawn (Ans. 4).

Laboratories, Incorporated, 566 U.S. 66, 82–84 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. 66, 79, 78).

Applying the framework in *Alice*, and as the first step of that analysis, the Examiner maintains that “the claims are directed to the abstract idea of assisting interaction between two humans, where one person has social orientation impairments, by interpreting user behaviors during said interaction and providing feedback on how to respond.” (Ans. 2). Citing *SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 Fed. App’x 950 (Fed. Cir. 2014) and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011), the Examiner finds that:

[T]he steps or functions claimed, including the decoding and generating steps, are akin to the abstract process of comparing new and stored information (i.e., action data and stored data) and using rules to identify options (i.e., comparing/matching action data to stored data to identify options for suggested response) which the court in *Smartgene*, and obtaining and comparing intangible data (i.e., receiving action data and comparing/matching action data to stored data) in *CyberSoure*, recognized as an abstract idea.

Id. at 3. Proceeding to the second step, the Examiner further finds that:

Although the claims recite additional elements, including computer constructs for performing the recited abstract steps or functions (e.g., a processor and memory; modules and components), these elements are interpreted as a generic “computing device” to implement the abstract idea. The mere recitation of “computer-implemented” is akin to adding the words “apply it” in conjunction with the abstract idea, and thus not enough to qualify as significantly more. The computer constructs of claims 1–18 and 21–26 are recited at a high level of generality with the only required function being to implement the abstract process.

Id. at 4. The Examiner has applied this analysis to all the claims in the rejection.

As an initial matter, we note that Appellant argues independent claims 1, 22, and 23 as a group. Appeal Br. 15; Reply Br. 3. We select independent claim 1 as representative. Thus, independent claims 22 and 23 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv). Addressing these arguments, in turn, we do not find any to be persuasive of error in the rejection thereof.

Turning to the first step of *Alice*, Appellant argues that the Examiner erred in rejecting the independent claims under 35 U.S.C. § 101 because “[n]o substantial evidence cited by the Examiner establishes that the claims are directed to ‘longstanding human organizing/social activity.’” (Appeal Br. 14). According to Appellant, “[i]n contrast to the financial methods in *Alice* and *Bilski*, Appellant’s claims are directed to a computer-implemented method and system of assisting interaction between a user with social orientation impairments and at least one human and a computer program product to perform the listed steps for assisting such interaction.” (*Id.*).

Appellant's argument is unpersuasive at least because abstract ideas are not limited to longstanding human organizing/social activity or financial methods. "The 'abstract idea' step of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter." *Affinity Labs of Tex. v. DirectTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016 (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016))); *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). There is no definitive rule to determine what constitutes an "abstract idea." Rather, the Federal Circuit has explained that "both [it] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish*, 822 F.3d 1327, 1334 (Fed. Cir. 2016); *see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (explaining that, in determining whether claims are patent eligible under § 101, "the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen – what prior cases were about, and which way they were decided").

Here, we agree with the Examiner that the claims are focused on a combination of abstract-idea processes. *See supra*. The purported advancement over the prior art is a process of automatically gathering and analyzing information associated with a social interaction and then displaying the results of the analysis to a user, without any inventive technology for performing those functions. This is the heart of the invention. *Cf. Intellectual Ventures I LLC v. Erie Indemnity Company*, 850

F.3d 1315, 1328 (Fed. Cir. 2017) (“the heart of the claimed invention lies in creating and using an index to search for and retrieve data . . . an abstract concept.”). The Examiner’s determination of the abstract idea is consistent with the description in the Specification of the problem solved by the invention. *See, e.g.*, Spec. 1, ll. 1–19 (“allow users of the system to better cope with such situations by providing socially contextual information on how they should react, thereby alleviating concerns about the other person’s true meanings.”).

We also cannot agree with Appellant’s contention that the claims before us are similar to the claims addressed in the Federal Circuit’s decision in *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). *See* Reply Br. 3–4.

In *McRO*, the Federal Circuit addressed claims directed to “[a] method for automatically animating lip synchronization and facial expression of three-dimensional characters” *McRO*, 837 F.3d at 1307. The court reviewed the specification of the patent at issue and found that, rather than invoking the computer merely as a tool, “[c]laim 1 of the [asserted] patent is focused on a specific asserted improvement in computer animation.” *Id.* at 1314. Here, Appellant has not adequately shown that collecting and analyzing information related to social interaction, and displaying the results to a user is rooted in an improvement in computer technology. Appellant has not offered any evidence that the computer implementation is novel or improves the functioning of the computer itself.

We note the similarity between the subject matter covered by claim 1 and the claims before the court in *Electric Power*, which were directed to

performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results. *Elec. Power*, 830 F.3d at 1351–52. The Federal Circuit held that the claims were directed to a combination of abstract ideas, explaining that “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Id.* at 1354 (“we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.”).

As in *Electric Power*, the focus of the claim here is not on “an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *Id.* For example, with respect to the claimed “decoding” step, the Specification discloses six enumerated techniques for decoding the meaning of action data in the list of bullet points on pages 9–10 of the Specification. Each of the listed techniques is described only by reference to earlier publications. “The specification fails to provide any technical details for the tangible components, but instead predominately describes the system and methods in purely functional terms.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016). There is no detail as to how the techniques are performed beyond citations to third party references. For example, the Specification discloses that “detecting a facial expression of the at least one human from the action data” can be performed “using a technique such as described in Iannou, S. Caridakis, G. Karpouzis, K. & Kollias, S., ‘Robust feature detection for

facial expression recognition’, *Journal on Image and Video Processing*, 2007(2), 5).” (Spec. 9, ll. 1–5). The use of existing techniques to decode data is itself an abstract idea and not an improvement to a computer or any other technology. *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (“abstract idea of encoding and decoding image data”); *see also Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340–41 (Fed. Cir. 2017) (organizing, displaying, and manipulating data encoded for human- and machine-readability is directed to an abstract concept).

We agree with the Examiner that the claimed invention is similar to the claims in *Smartgene*. The claims in *Smartgene* involved gathering information and applying “expert rules” to generate “advisory information.” *SmartGene*, 555 F. App’x at 952. Our reviewing court found the claims patent-ineligible because they did “no more than call on a ‘computing device,’ with basic functionality for comparing stored and input data and rules, to do what doctors do routinely.” *Id.* at 954. Thus, Appellant’s argument that “[t]he response persuading component involves clear data matching techniques rather than any abstract comparing steps” (Appeal Br. 16) does not apprise us of error in the rejection because Appellant has not

shown how the claimed matching amounts to more than comparing stored and input data.⁴

Turning to the second step of *Alice*, Appellant argues that “the claims recite significantly more than conventional activities capable of being performed by a generic computing device, which satisfy the second step of the *Alice* test” because “none of the cited references disclose a response persuading component” Appeal Br. 16. *See also*, Reply Br. 5 (“Appellant emphasizes that it has successfully overcome all prior art rejections based upon anticipation and obviousness grounds” and “the closest prior art fails to mention the response persuading component.”).

But to the extent that Appellant maintains that the elements of the claim necessarily amount to “significantly more” than the abstract idea because the claimed process is allegedly patentable over the prior art, Appellant misapprehends the controlling precedent. Although the second step in the *Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for “an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent

⁴ *See also*, *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” not patent eligible); and *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (“[s]imply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible” (internal citation omitted)).

upon the [ineligible concept] itself.” *Alice Corp.*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90. Thus, an abstract idea does not transform into an inventive concept just because the Examiner has not found prior art that discloses or suggests it. Indeed, “[t]he ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” *Diamond v. Diehr*, 450 U.S. 175, 188–189 (1981).

We also cannot agree with Appellant’s contention that the claims before us are similar to the claims held eligible in *Diehr*. *See* Appeal Br. 16–17. Appellant’s reliance on *Diehr* is misplaced because the claims in *Diehr* were directed to a process for curing synthetic rubber, and recited a series of steps (e.g., the loading of a mold with raw, uncured rubber, closing the mold, constantly determining the mold temperature, constantly recalculating the cure time, and automatically opening the press at the proper time) that together provided a significant and novel practical application of the abstract idea (i.e., the well-known Arrhenius equation). *See Diehr*, 450 U.S. at 184–87.

Unlike the process claimed in *Diehr*, which was directed to a specific industrial process, i.e., “a physical and chemical process for molding precision synthetic rubber products,” *id.* at 184, claim 1 merely recites a computer-implemented method of assisting interaction by collecting and analyzing data, comparing data, and displaying the result.

Accordingly, we are not persuaded for the reasons set forth above that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection of claim 1, including independent claims 22 and 23, which fall with claim 1. We also sustain the Examiner's rejection of dependent claims 2–18, 21, and 24–26, which are not argued separately.

DECISION

The rejection of claims 1–18 and 21–26 under 35 U.S.C. § 101 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED